

WHAT IS CLAIMED IS:

1. A protein having an amino acid sequence represented by SEQ ID NO:1 and functionally active homologues thereof.

Sub B1  
2. A protein as claimed in claim 1 having an amino acid sequence where one or more amino acid residue(s) in the amino acid sequence represented by SEQ ID NO:1 is/are deleted, added or substituted.

3. A protein as claimed in claim 1 having an amino acid sequence represented by SEQ ID NO:1.

4. A DNA molecule which encodes a protein having an amino acid sequence represented by SEQ ID NO:1 or which encodes a protein which is a functionally active homologue of the protein having an amino acid sequence represented by SEQ ID NO:1.

5. A DNA molecule as claimed in claim 4 which encodes a protein having an amino acid sequence where one or more amino acid residue(s) in the amino acid sequence represented by SEQ ID NO:1 is/are deleted, added or substituted.

6. A DNA molecule as claimed in claim 4 which encodes a protein having an amino acid sequence represented by SEQ ID NO:1.

7. A DNA molecule according to claim 4, wherein said molecule has a nucleotide sequence represented by SEQ ID NO:2.

8. A DNA molecule according to claim 4, wherein said molecule has a nucleotide sequence represented by a functionally active homologue of SEQ ID NO:2.

9. A monoclonal antibody against a protein according to claim 1.

10. A monoclonal antibody as claimed in claim 9 which is against proteins having an amino acid sequence where one or more amino acid residue(s) in the amino acid sequence represented by SEQ ID NO:1 is/are deleted, added or substituted.

11. A monoclonal antibody as claimed in claim 9 which is a mouse monoclonal antibody.

12. A chimeric antibody having a variable region of the mouse monoclonal antibody according to claim 11 and a constant region of a human type antibody.

13. A pharmaceutical agent containing an antibody according to claim 12 as an effective ingredient.

14. A pharmaceutical agent according to claim 13 where said agent is a therapeutic agent against AIDS.

15. A human type antibody having a complementary-determining region of the mouse monoclonal antibody according to claim 11.

16. A pharmaceutical agent containing an antibody according to claim 15 as an effective ingredient.

17. A pharmaceutical agent according to claim 16 where said agent is a therapeutic agent against AIDS.

18. An anti-Nef-attachable protein monoclonal antibody which has a high affinity to Molt-4 clone no.8 cells (human CD4<sup>+</sup> T cell line) and U937 cells (human macrophage cell line) and does not bind or attach to Raji cells (human B cell line), BT-2 cells (human gliocyte cell line) and Gin-1 cells (human fibroblast cell line).

19. A monoclonal antibody as claimed in claim 18 which is a mouse monoclonal antibody.

20. A chimeric antibody having a variable region of the mouse monoclonal antibody according to claim 19 and a constant region of a human type antibody.

21. A human type antibody having a complementary-determining region of the mouse monoclonal antibody according to claim 19.

22. A pharmaceutical agent containing an antibody according to claim 20 as an effective ingredient.

23. A pharmaceutical agent according to claim 22 where said agent is a therapeutic agent against AIDS.

24. A pharmaceutical agent containing an antibody according to claim 21 as an effective ingredient.

25. A pharmaceutical agent according to claim 24 where said agent is a therapeutic agent against AIDS.

26. A method to diagnose the development of AIDS comprising using a protein according to claim 1 as an index.

27. A method to diagnose the development of AIDS comprising using the DNA molecule according to claim 4.

28. A method for screening for a therapeutic agent against AIDS comprising using a Nef-binding property of a protein according to claim 1.